IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An information processing apparatus ~~that serves as a reproduction instruction apparatus~~ that transmits a data reproduction process request packet to a node connected to a network and executes a reproduction of reproduction object data, based on return data, the information processing apparatus comprising:

a data transmission setting unit configured to determine a transmission percentage for each of one or more data transmission modes according to a demand level of the reproduction object data;

a processor configured to set an address in accordance with the one or more data transmission modes, to set a ~~judgment~~ probability value based on a number of encoded blocks of the reproduction object data, to indicate to the node whether to execute a process to return the return data to the ~~reproduction instruction~~ information processing apparatus, and to generate the data reproduction process request packet, which stores the ~~judgment~~ probability value and a designation of the reproduction object data; and

a network interface unit that transmits the data reproduction process request packet to the node at the address and receives the return data.

2. (Canceled)

3. (Previously Presented) The information processing apparatus according to claim 1, wherein the one or more data transmission modes include a carousel transmission mode, a chaining transmission mode, a distributed cache mode, and a client server mode.

4. (Previously Presented) The information processing apparatus according to claim 3, wherein,

when the demand level of the reproduction object data is above a first predetermined threshold, the transmission percentage of the carousel transmission mode is 100%;

when the demand level of the reproduction object data is below the first predetermined threshold and above a second predetermined threshold, the transmission percentage of the carousel transmission mode is greater than 0% and less than 100%; and

when the demand level of the reproduction object data is below the second predetermined threshold and above a third predetermined threshold, a sum of the transmission percentage of the carousel transmission mode and the transmission percentage of the distributed cache mode is greater than 0% and less than 100%.

5. (Previously Presented) The information processing apparatus according to claim 4, wherein, when the demand level of the reproduction object data is below the third predetermined threshold, the transmission percentage of the client server mode is 100%.

6. (Currently Amended) The information processing apparatus according to claim 1, wherein the data transmission setting unit is configured to select a carousel transmission mode as one of the ~~return~~ one or more data transmission [[mode]] modes, when the demand level of the reproduction object data is higher than a preset threshold value.

7. (Previously Presented) The information processing apparatus according to claim 1, further comprising:

a data recovery processing unit configured to execute a deinterleave process and an FEC decoding process on the return data to produce the reproduction object data.

8-9. (Canceled)

10. (Currently Amended): An information processing apparatus ~~that serves as a reproduction instruction apparatus~~ that transmits a data reproduction process request packet to a node connected to a network and executes a reproduction of reproduction object data, based on return data, the information processing apparatus comprising:

a data transmission setting unit configured to select one or more data transmission modes as a return data transmission mode, from a plurality of data transmission modes, and to determine a transmission bandwidth percentage for each of the selected one or more data transmission modes according to a demand level of the reproduction object data;

a packet generating unit configured to set the reproduction object data and an address in accordance with transmission bandwidth percentages determined by the data transmission setting unit, and to generate the data reproduction process request packet, which stores designation data for the reproduction object data~~, as a request statement~~; and

a network interface unit configured to transmit the data reproduction process request packet generated by the packet generating unit, wherein the ~~reproduction object~~ <u>return</u> data stored at the node is encoded data at an encoding rate of q/p converted from a number of blocks p of divided data into a number of blocks q by FEC encoding, and the packet generating unit is configured to set a probability value ß indicating that the node returns <u>the return</u> data at a return probability β, such that β is greater than $p / (q \times \alpha \times n)$, where (1) α is a record probability designated by a record instruction apparatus connected to the network, (2) q is a number of encoded blocks q, (3) n is a number of network-connected nodes, and (4) p is the number of blocks p.

11-13. (Canceled)

14. (Currently Amended) An information processing method for a reproduction instruction apparatus for transmitting a data reproduction process request packet to a node connected to a network and for executing a reproduction of reproduction object data, based on return data, the information processing method comprising:

determining a transmission percentage for each of one or more data transmission modes according to a demand level of the reproduction object data;

setting an address in accordance with the one or more data transmission modes;

generating, with a processor of the reproduction instruction apparatus, the data reproduction process request packet, which stores a ~~judgment~~ probability value based on a number of encoded blocks of the reproduction object data, and a designation of the reproduction object data, the ~~judgment~~ probability value indicating to the node whether to execute a process to return the return data to the reproduction instruction apparatus; and

transmitting the data reproduction process request packet to the node at the address to receive the return data.

15. (Canceled)

16. (Previously Presented) The information processing method according to claim 14, wherein the one or more data transmission modes include a carousel transmission mode, a chaining transmission mode, a distributed cache mode, and a client server mode.

17. (Previously Presented) The information processing method according to claim 16, wherein,

when the demand level of the reproduction object data is above a first predetermined threshold, the transmission percentage of the carousel transmission mode is 100%;

when the demand level of the reproduction object data is below the first predetermined threshold and above a second predetermined threshold, the transmission percentage of the carousel transmission mode is greater than 0% and less than 100%; and

when the demand level of the reproduction object data is below the second predetermined threshold and above a third predetermined threshold, a sum of the transmission percentage of the carousel transmission mode and the transmission percentage of the distributed cache mode is greater than 0% and less than 100%.

18. (Previously Presented) The information processing method according to claim 17, wherein, when the demand level of the reproduction object data is below the third predetermined threshold, the transmission percentage of the client server mode is 100%.

19. (Previously Presented) The information processing method according to claim 14, wherein the determining includes selecting a carousel transmission mode as one of the one or more data transmission modes when the demand level of the reproduction object data is higher than a preset threshold value.

20. (Previously Presented) The information processing method according to claim 14, further comprising:

executing a deinterleave process and an FEC decoding process on the return data to produce the reproduction object data.

21-22. (Canceled)

23. (Currently Amended) An information processing method for a reproduction instruction apparatus for transmitting a data reproduction process request packet to a node connected to a network and for executing a reproduction of reproduction object data, based on return data, the information processing method comprising:

selecting one or more data transmission modes as a return data transmission mode, from a plurality of data transmission modes;

determining a transmission bandwidth percentage for each of the selected one or more data transmission modes according to a demand level of the reproduction object data;

setting the reproduction object data and an address in accordance with transmission bandwidth percentages determined in the determining;

generating, with a processor of the reproduction instruction apparatus, the data reproduction process request packet, which stores designation data for the reproduction object data~~, as a request statement~~; and

transmitting the packet generated by the generating, wherein the return ~~reproduction object~~ data stored at the node is encoded data at an encoding rate of q/p converted from a number of blocks p of divided data into a number of blocks q by FEC encoding, and the generating includes setting a probability value β indicating that the node returns the return data at a return probability β, such that β is greater than $p / (q \times \alpha \times n)$, where (1) α is a record probability designated by a record instruction apparatus connected to the network, (2) q is a number of encoded blocks q, (3) n is a number of network-connected nodes, and (4) p is the number of blocks p.

24-29. (Canceled)

30. (Currently Amended) The information processing apparatus according to claim 1, wherein the network interface unit receives [[a]] the demand level of the reproduction object data.